Remarks/Arguments

The Examiner rejected claims 1-8 and 11-16 under 35 USC 102 based on Roberg (DE 0 631 717 A1).

The grounds for the rejection were that the device of Roberg, FIGURE 9, discloses all the elements of the claim.

The applicants respectfully traverse the Examiner's rejection of the claims.

Roberg discloses a conical or funnel-shaped housing "Gehause" [housing] 4 with a "Übergabetrichter" [delivery funnel ] 5 fixed to the open lower end of the housing 4. There is a "Wurfgebläse" [unknown] 6 at the lower end of the delivery funnel with a "Rotor (Gebläseläufer)" [rotor (blower runner) ] 25 inside that blows the material introduced into the top of the funnel out the rear of the Wurfgebläse 6. A structure 39, which appears to be an oscillating conveyor, feeds material into the top of the Roberg funnel 5. The housing 4 does not have a bottom.

The Roberg chopper 3 is disposed above conveyor 39 and has a baffle (in dashed lines) inserted between it and conveyor 39. The material that Roberg chopper 3 chops falls into chopper 3 from an opening located above chopper 3. The material carried by conveyor 39 is inserted not into chopper 3, but into the stream of already chopped material that previously passed through chopper 3 from above and falls into the funnel 5.

Claim 1 recites a discharge device for discharging crop residue stream from a harvesting machine, comprising a rotatable chopper mounted in a housing with a bottom, wherein the housing bottom is connected to the harvesting machine by means of an oscillating rocker so that the housing bottom can oscillate in a direction of motion back-and-forth for feeding residual crop material through the chopper.

Regarding claim 1, the Examiner identified conveyor 39 as the claimed "housing bottom [that] can oscillate ... back and forth ... for feeding residual crop material through the chopper."

First, conveyor 39 is not a "bottom" of Roberg's housing 4 that "chopper" 3 is "mounted in." See claim 1.

Second, conveyor 39 does not oscillate to feed crop material ***through*** the chopper. A deflector (shown in FIG. 9 in dashed lines) directs the chaff from conveyor 39 downward into the stream of chopped material falling from chopper 3

into funnel 5. The chaff from conveyor 39 does not pass "through" the chopper, therefore conveyor 39 does not "feed crop material through the chopper". See claim 1.

Regarding claim 3, assuming arguendo, that conveyor 39 has a "step-shaped shoulder", it does not function to "push ... residual crop material ***through the chopper***" since the chaff is deflected by a deflector and falls into funnel 5 instead of passing "through the chopper" as required by claim 3.

Regarding claim 4, Roberg shows no "housing bottom ... oscillated ... back-and-forth for feeding residual crop material ***through the chopper***" as recited by claim 4. See claims 1 and 4, above. Roberg conveyor 39 does not feed anything through the chopper, it feeds material into the top of funnel 5. Gravity directs the material downward into rotor 25 for distribution into the field. A deflector in housing 4 (shown in dashed lines) is disposed between conveyor 39 and chopper 3 to keep the conveyor 39 material out of Roberg housing 4 and away from chopper 3.

We have been unable to find anything in the Roberg German reference that says the material entering housing 4 from conveyor 39 is somehow lifted upward into the rotor rather than inherently falling downward under the force of gravity into funnel 5.

Further regarding claim 4, the Roberg oscillating conveyor 39 that pours material into funnel 5 is not "the housing bottom" of the Roberg housing 4 and therefore Roberg does not disclose a "***chopper mounted in a housing with a bottom***" wherein ***"the housing bottom*** can be oscillated ... back-and-forth for feeding residual crop material through the chopper". See claim 4.

The bottom of Roberg housing 4 in which Roberg chopper 3 is mounted does not oscillate. It is conveyor 39, which is not a bottom of the housing 4 but oscillates adjacent to housing 4 that oscillates, not any part of Roberg housing 4 itself.

Regarding claim 11, Roberg does not disclose an "oscillating floor bottom" and a distinct "oscillating housing bottom" that are both "connected mechanically to a cleaning shoe". There is one long oscillating structure in Robards and that is conveyor 39.

Regarding claim 12, Roberg does not disclose "an oscillating floor bottom, that is "pivotally connected to the "oscillating housing bottom". There is no pivotal connection along conveyor 39. Conveyor 39 terminates at the edge of housing 39,

and there is not extra oscillating housing bottom "pivotally connected" to conveyor 39 that could possibly form an "oscillating housing bottom". Thus there is no claim 12 "oscillating floor bottom [ ] connected to the oscillating housing bottom by a pivotable joint".

Regarding claim 13, Roberg in FIGURE 9 cannot and does not disclose BOTH (1) a "rigidly connected" oscillating housing bottom and oscillating floor bottom (see claim 13) AND (2) a "pivotable joint" "connected" oscillating a housing bottom and oscillating floor bottom (see claim 12). Only one embodiment is shown in FIGURE 9.

The Applicants, on the other hand, show TWO embodiments, a first "rigidly connected" oscillating floor and oscillating housing bottom in FIGURE 2 (see claim 12), and a "pivotably" "connected" oscillating floor and oscillating housing bottom in FIGURES 3-4 (see claim 13). Note the pivot joint 96 in FIGURES 3 and 4 of the present application. This joint is completely absent that is completely absent from FIGURE 2 of the present application.

Roberg FIGURE 9, which shows only a single embodiment cannot disclose both a rigid and a flexible connection between two components, only one.

Finally, and with regard to all the claims, Roberg ***teaches against*** conducting the conveyor 39 material "through" the chopper 3 in three different ways.

First, Roberg FIGURE 9 provides a baffle (shown in dashed lines) that is positioned between the chopper 3 and the incoming stream of material from conveyor 39 thereby deflecting the material from conveyor 39 directly downward into funnel 5 and thence into rotor 25.

Second Roberg discloses keeping the material out of chopper 3 in FIGURE 6. In Roberg Figure 6 the material from a horizontal conveyor is added into funnel 5 below chopper 3 to the already chopped material stream falling from chopper 3. Just like the conveyor 39 material in Roberg FIGURE 9, the FIGURE 6 conveyor 39 material is not chopped.

Third, Roberg discloses keeping the material not only completely out of chopper 3 but also out of funnel 5 in FIGURE 7. In Roberg FIGURE 7, the material on a horizontal conveyor is introduced into the bottom chamber attached to funnel 5 where it is forced upward into rotor 25 for blowing onto the field.

*Support for the New Claim*

Support for new claim 17 can be found at least in FIGURES 2-4 and in the specification in paragraphs 11 and 16, which show the tangential relationship between the bottom and the chopper, the chopper extending to and beyond the point of tangency of the bottom with respect to the chopper, which explain the tangential movement of the bottom with respect to the chopper, and which explain the constant spacing between the bottom and the chopper. As shown in the figures, the bottom of the hopper extends beyond a point of closest approach or tangency of the bottom with respect to the housing.

Respectfully,

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